

# MICRO-HEATING APPARATUS FOR LOCALLY CONTROLLING THE TEMPERATURE IN A MOLD

## Abstract

A micro-heating apparatus for locally controlling a temperature in a mold includes substrate, at least a micro-heating module installed on the substrate, and at least a temperature detector installed on the substrate near the micro-heater for measuring the local temperature. The micro-heating module includes a micro-heater, an external power circuit, and a connection electrode for connecting the external power circuit and a programmable external power device. The substrate with the micro-heating module and the temperature detector thereon is capable of combining with the mold so that the micro-heater contacts a plastic material in the mold. The programmable external power device is used for connecting to the external power circuit to control the micro-heater to heat the plastic material so as to control the temperature when the temperature around an interface of the plastic material and the micro-heater is measured.